H3 0400

RAW SEQUENCE LISTING   DATE: 12/26/2000   **ENTERED**
PATENT APPLICATION: US/09/730,469   TIME: 13:40:37

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\12262000\I730469.raw

```
 4 <110> APPLICANT: Anthony P. Heaney
 5            Gregory A. Horwitz
 6            Xun Zhang
 7            Shlomo Melmed
 9 <120> TITLE OF INVENTION: Methods of Using Pituitary Tumor
10            Transforming Gene (PTTG) Carboxy-terminal Peptides to
11            Inhibit Neoplastic Cellular Proliferation And/Or
12            Transformation of Breast and Ovarian Cells
15 <130> FILE REFERENCE: CEDAR-45257
C--> 17 <140> CURRENT APPLICATION NUMBER: US/09/730,469
18 <141> CURRENT FILING DATE: 2000-12-04
20 <150> PRIOR APPLICATION NUMBER: US CIP 09/687,911
21 <151> PRIOR FILING DATE: 2000-10-13
23 <150> PRIOR APPLICATION NUMBER: US CIP 09/569,956
24 <151> PRIOR FILING DATE: 2000-05-12
26 <150> PRIOR APPLICATION NUMBER: US 08/894,251
27 <151> PRIOR FILING DATE: 1999-07-23
29 <150> PRIOR APPLICATION NUMBER: PCT/US97/21463
30 <151> PRIOR FILING DATE: 1997-11-21
32 <150> PRIOR APPLICATION NUMBER: US 60/031,338
33 <151> PRIOR FILING DATE: 1996-11-21
35 <160> NUMBER OF SEQ ID NOS: 19
37 <170> SOFTWARE: FastSEQ for Windows Version 4.0
39 <210> SEQ ID NO: 1
40 <211> LENGTH: 974
41 <212> TYPE: DNA
42 <213> ORGANISM: Rattus rattus
44 <400> SEQUENCE: 1
45 aattcggcac gagccaacct tgagcatctg atcctcttgg cttctccttc ctatcgctga 60
46 gctggtaggc tggagacagt tgtttgggtg ccaacatcaa caaacgattt ctgtagttta 120
47 gcgtttatga ccctggcgtg aagatttaag gtctggatta agcctgttga cttctccagc 180
48 tacttctaaa tttttgtgca taggtgctct ggtctctgtt gctgcttagt tcttccagcc 240
49 ttcctcaatg ccagtttttat aatatgcagg tctctcccct cagtaatcca ggatggctac 300
50 tctgatcttt gttgataagg ataacgaaga gccaggcagc cgtttggcat ctaaggatgg 360
51 attgaagctg ggctctggtg tcaaagcctt agatgggaaa ttgcaggttt caacgccacg 420
52 agtcggcaaa gtgttcggtg ccccaggctt gcctaaagcc agcaggaagg ctctgggaac 480
53 tgtcaacaga gttactgaaa agccagtgaa gagtagtaaa cccctgcaat cgaaacagcc 540
54 gactctgagt gtgaaaaaga tcaccgagaa gtctactaag acacaaggct ctgctcctgc 600
55 tcctgatgat gcctacccag aaatagaaaa gttcttccgc ttcgatcctc tagattttga 660
56 gagtttttgac ctgcctgaag agcaccagat ctcacttctc cccttgaatg gagtgcctct 720
57 catgatcctg aatgaagaga gggggcttga gaagctgctg cacctggacc cccttcccc 780
58 tctgcagaag cccttcctac cgtgggaatc tgatccgttg ccgtctcctc ccagcgcct 840
59 ctccgctctg gatgttgaat tgccgcctgt ttgttacgat gcagatattt aaacgtctta 900
60 ctccttata gtttatgtaa gttgtattaa taaagcattt gtgtgtaaaa aaaaaaaaa 960
61 aaactcgaga gtac                                                974
63 <210> SEQ ID NO: 2
64 <211> LENGTH: 199
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65 <212> TYPE: PRT
66 <213> ORGANISM: Rattus rattus
68 <400> SEQUENCE: 2
69 Met Ala Thr Leu Ile Phe Val Asp Lys Asp Asn Glu Glu Pro Gly Ser
70  1               5                   10                  15
71 Arg Leu Ala Ser Lys Asp Gly Leu Lys Leu Gly Ser Gly Val Lys Ala
72              20                  25                  30
73 Leu Asp Gly Lys Leu Gln Val Ser Thr Pro Arg Val Gly Lys Val Phe
74          35                  40                  45
75 Gly Ala Pro Gly Leu Pro Lys Ala Ser Arg Lys Ala Leu Gly Thr Val
76      50                  55                  60
77 Asn Arg Val Thr Glu Lys Pro Val Lys Ser Ser Lys Pro Leu Gln Ser
78 65                  70                  75                  80
79 Lys Gln Pro Thr Leu Ser Val Lys Lys Ile Thr Glu Lys Ser Thr Lys
80                  85                  90                  95
81 Thr Gln Gly Ser Ala Pro Ala Pro Asp Asp Ala Tyr Pro Glu Ile Glu
82                  100                 105                 110
83 Lys Phe Phe Pro Phe Asp Pro Leu Asp Phe Glu Ser Phe Asp Leu Pro
84          115                 120                 125
85 Glu Glu His Gln Ile Ser Leu Leu Pro Leu Asn Gly Val Pro Leu Met
86          130                 135                 140
87 Ile Leu Asn Glu Glu Arg Gly Leu Glu Lys Leu Leu His Leu Asp Pro
88 145                 150                 155                 160
89 Pro Ser Pro Leu Gln Lys Pro Phe Leu Pro Trp Glu Ser Asp Pro Leu
90              165                 170                 175
91 Pro Ser Pro Pro Ser Ala Leu Ser Ala Leu Asp Val Glu Leu Pro Pro
92              180                 185                 190
93 Val Cys Tyr Asp Ala Asp Ile
94          195
97 <210> SEQ ID NO: 3
98 <211> LENGTH: 779
99 <212> TYPE: DNA
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 3
103 atggccgcga gttgtggttt aaaccaggag tgccgcgcgt ccgttcaccg cggcctcaga 60
104 tgaatgcggc tgttaagacc tgcaataatc cagaatggct actctgatct atgttgataa 120
105 ggaaaatgga gaaccaggca cccgtgtggt tgctaaggat gggctgaagc tggggtctgg 180
106 accttcaatc aaagccttag atgggagatc tcaagtttca acaccacgtt ttggcaaaac 240
107 gttcgatgcc ccaccagcct tacctaaagc tactagaaag gcttggggaa ctgtcaacag 300
108 agctacagaa aagtctgtaa agaccaaggg acccctcaaa caaaaacagc caagcttttc 360
109 tgccaaaaag atgactgaga agactgttaa agcaaaaagc tctgttcctg cctcagatga 420
110 tgcctatcca gaaatagaaa aattctttcc cttcaatcct ctagactttg agagtttttga 480
111 cctgcctgaa gagcaccaga ttgcgcacct cccttgagt ggagtgcctc tcatgatcct 540
112 tgacgaggag agagagcttg aaaagctgtt tcagctgggc cccccttcac ctgtgaagat 600
113 gccctctcca ccatgggaat ccaatctgtt gcagtctcct tcaagcattc tgtcgaccct 660
114 ggatgttgaa ttgccacctg tttgctgtga catagatatt taaatttctt agtgcttcag 720
115 agtttgtgtg tatttgtatt aataaagcat tctttaacag ataaaaaaaa aaaaaaaaa 779
117 <210> SEQ ID NO: 4
118 <211> LENGTH: 202
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Input Set : A:\seqlist.txt
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119 <212> TYPE: PRT
120 <213> ORGANISM: Homo sapiens
122 <400> SEQUENCE: 4
123 Met Ala Thr Leu Ile Tyr Val Asp Lys Glu Asn Gly Glu Pro Gly Thr
124  1               5                  10                  15
125 Arg Val Val Ala Lys Asp Gly Leu Lys Leu Gly Ser Gly Pro Ser Ile
126             20                  25                  30
127 Lys Ala Leu Asp Gly Arg Ser Gln Val Ser Thr Pro Arg Phe Gly Lys
128         35                  40                  45
129 Thr Phe Asp Ala Pro Pro Ala Leu Pro Lys Ala Thr Arg Lys Ala Leu
130     50                  55                  60
131 Gly Thr Val Asn Arg Ala Thr Glu Lys Ser Val Lys Thr Lys Gly Pro
132 65                  70                  75                  80
133 Leu Lys Gln Lys Gln Pro Ser Phe Ser Ala Lys Lys Met Thr Glu Lys
134                 85                  90                  95
135 Thr Val Lys Ala Lys Ser Ser Val Pro Ala Ser Asp Asp Ala Tyr Pro
136                 100                 105                 110
137 Glu Ile Glu Lys Phe Phe Pro Phe Asn Pro Leu Asp Phe Glu Ser Phe
138             115                 120                 125
139 Asp Leu Pro Glu Glu His Gln Ile Ala His Leu Pro Leu Ser Gly Val
140         130                 135                 140
141 Pro Leu Met Ile Leu Asp Glu Glu Arg Glu Leu Glu Lys Leu Phe Gln
142 145                 150                 155                 160
143 Leu Gly Pro Pro Ser Pro Val Lys Met Pro Ser Pro Pro Trp Glu Ser
144                 165                 170                 175
145 Asn Leu Leu Gln Ser Pro Ser Ser Ile Leu Ser Thr Leu Asp Val Glu
146                 180                 185                 190
147 Leu Pro Pro Val Cys Cys Asp Ile Asp Ile
148         195                 200
151 <210> SEQ ID NO: 5
152 <211> LENGTH: 31
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial Sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: Synthetic oligonucleotide.
159 <400> SEQUENCE: 5
160 gatgctctcc gcactctggg aatccaatct g                        31
162 <210> SEQ ID NO: 6
163 <211> LENGTH: 32
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Synthetic oligonucleotide.
170 <400> SEQUENCE: 6
171 ttcacaagtt gaggggcgcc cagctgaaac ag                       32
173 <210> SEQ ID NO: 7
174 <211> LENGTH: 32
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
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```
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Synthetic oligonucleotide specific to pCI-neo
180      plasmid vector.
182 <400> SEQUENCE: 7
183 ggctagagta cttaatacga ctcactatag gc                              32
185 <210> SEQ ID NO: 8
186 <211> LENGTH: 31
187 <212> TYPE: DNA
188 <213> ORGANISM: Homo sapiens
190 <400> SEQUENCE: 8
191 ctatgtcaca gcaaacaggt ggcaattcaa c                               31
193 <210> SEQ ID NO: 9
194 <211> LENGTH: 56
195 <212> TYPE: PRT
196 <213> ORGANISM: Homo sapiens
198 <400> SEQUENCE: 9
199 Met Ile Leu Asp Glu Glu Arg Glu Leu Glu Lys Leu Phe Gln Leu Gly
200  1               5                  10                  15
201 Pro Pro Ser Pro Val Lys Met Pro Ser Pro Pro Trp Glu Ser Asn Leu
202              20                  25                  30
203 Leu Gln Ser Pro Ser Ser Ile Leu Ser Thr Leu Asp Val Glu Leu Pro
204          35                  40                  45
205 Pro Val Cys Cys Asp Ile Asp Ile
206      50                  55
209 <210> SEQ ID NO: 10
210 <211> LENGTH: 168
211 <212> TYPE: DNA
212 <213> ORGANISM: Homo sapiens
214 <400> SEQUENCE: 10
215 atgatccttg acgaggagag agagcttgaa aagctgtttc agctgggccc cccttcacct 60
216 gtgaagatgc cctctccacc atgggaatcc aatctgttgc agtctccttc aagcattctg 120
217 tcgaccctgg atgttgaatt gccacctgtt tgctgtgaca tagatatt           168
219 <210> SEQ ID NO: 11
220 <211> LENGTH: 16
221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Anchored primer sequence.
227 <400> SEQUENCE: 11
228 aagctttttt tttttg                                                16
230 <210> SEQ ID NO: 12
231 <211> LENGTH: 13
232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Arbitrary primer sequence.
238 <400> SEQUENCE: 12
239 aagcttgctg ctc                                                   13
241 <210> SEQ ID NO: 13
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Input Set : A:\seqlist.txt
Output Set: N:\CRF3\12262000\I730469.raw
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```
242 <211> LENGTH: 16
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: n = a, g, or c; Anchored primer sequence.
249 <400> SEQUENCE: 13
W--> 250 aagctttttt tttttn                                            16
252 <210> SEQ ID NO: 14
253 <211> LENGTH: 194
254 <212> TYPE: PRT
255 <213> ORGANISM: Mus musculus
257 <400> SEQUENCE: 14
258 Met Ala Thr Leu Ile Phe Val Asp Lys Asp Asn Glu Glu Pro Gly Arg
259  1               5                  10                  15
260 Arg Leu Ala Ser Lys Asp Gly Leu Lys Leu Gly Thr Gly Val Lys Ala
261             20                  25                  30
262 Leu Asp Gly Lys Leu Gln Val Ser Thr Pro Arg Val Gly Lys Val Phe
263         35                  40                  45
264 Asn Ala Pro Ala Val Pro Lys Ala Ser Arg Lys Ala Leu Gly Thr Val
265     50                  55                  60
266 Asn Arg Val Ala Glu Lys Pro Met Lys Thr Gly Lys Pro Leu Gln Pro
267 65                  70                  75                  80
268 Lys Gln Pro Thr Leu Thr Gly Lys Lys Ile Thr Glu Lys Ser Thr Lys
269             85                  90                  95
270 Thr Gln Ser Ser Val Pro Ala Pro Asp Asp Ala Tyr Pro Glu Ile Glu
271             100                 105                 110
272 Lys Phe Phe Pro Phe Asn Pro Leu Asp Phe Asp Leu Pro Glu Glu His
273         115                 120                 125
274 Gln Ile Ser Leu Leu Pro Leu Asn Gly Val Pro Leu Ile Thr Leu Asn
275     130                 135                 140
276 Glu Glu Arg Gly Leu Glu Lys Leu Leu His Leu Gly Pro Pro Ser Pro
277 145                 150                 155                 160
278 Leu Lys Thr Pro Phe Leu Ser Trp Glu Ser Asp Pro Lys Pro Pro Ser
279             165                 170                 175
280 Ala Leu Ser Thr Leu Asp Val Glu Leu Pro Pro Val Cys Tyr Asp Ala
281             180                 185                 190
282 Asp Ile
286 <210> SEQ ID NO: 15
287 <211> LENGTH: 945
288 <212> TYPE: DNA
289 <213> ORGANISM: Mus musculus
291 <400> SEQUENCE: 15
292 tcttgaactt gttatgtagc aggaggccaa atttgagcat cctcttggct tctctttata 60
293 gcagagattg taggctggag acagttttga tgggtgccaa cataaactga tttctgtaag 120
294 agttgagtgt tttatgaccc tggcgtgcag atttaggatc tggattaagc ctgttgactt 180
295 ctccagctac ttataaattt ttgtgcatag gtgccctggg taaagcttgg tctctgttac 240
296 tgcgtagttt ttccagccgt ctcaatgcca atattcaggc tctctccctt agagtaatcc 300
297 agaatggcta ctcttatctt tgttgataag gataatgaag aacccggccg ccgtttggca 360
298 tctaaggatg ggttgaagct gggcactggt gtcaaggcct tagatgggaa attgcaggtt 420
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VERIFICATION SUMMARY   DATE: 12/26/2000
PATENT APPLICATION: US/09/730,469   TIME: 13:40:38

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\12262000\I730469.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application Number
L:250 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:13
L:250 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:13
L:250 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:13